

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number  
**WO 2005/031310 A2**

(51) International Patent Classification<sup>7</sup>: **G01N**  
(21) International Application Number:  
PCT/US2004/031739  
(22) International Filing Date:  
27 September 2004 (27.09.2004)  
(25) Filing Language: English  
(26) Publication Language: English  
(30) Priority Data:  
60/506,125 25 September 2003 (25.09.2003) US

(71) Applicant (for all designated States except US): **SAGRES DISCOVERY, INC** [US/US]; P.O. Box 8097, Emeryville, CA 94662-8097 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HANSON, Michael** [US/US]; c/o Sagres Discovery, Inc, P.O. Box 8097, Emeryville, CA 94662-8097 (US).

(74) Agents: **LAUNER, Charlene, A. et al.**; Chiron Corporation, Intellectual Property, P.O. Box 8097, Emeryville, CA 94662-8097 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **FRACTAL-FORMING ALKYLKETENE DIMERS FOR INTEGRAL MEMBRANE PROTEIN CRYSTAL GROWTH**

(57) Abstract: This invention provides a device for promoting crystallization of integral membrane proteins using a surface of alkylketene dimers doped with a nucleating compound. A coating that enhances crystallization of integral membrane proteins in the presence of detergent is provided. In another aspect of the invention methods of creating a surface of alkylketene dimers doped with a nucleating compound to promote crystallization of integral membrane proteins are provided. In another aspect of the invention methods of crystallizing integral membrane proteins using surfaces coated with alkylketene dimers doped with a nucleating compound are provided.



**WO 2005/031310 A2**